Muslim Genius; Ibn Sina’s Effects on Cardiology

Sabri Onur Caglar, Fatma Erdem, Alim Erdem
Department of Cardiology, Abant Izzet Baysal Training and Research Hospital, Bolu, Turkey

Abstract

Ibn Sina (980-1037) was born in the village of Afshana, near Bukhara. Ibn Sina received his early education in his town and by the age of 10 he became a Quran Hafiz. He had exceptional intellectual skills. In some of his teenage years he lived in Anatolia. At the age of sixteen he dedicated all his efforts to learn medicine and when he was eighteen, he gained the status of a reputed physician. His synthesis of Islamic medicine, al Qanun reputed physician fi’l tibb (The Canon of Medicine), was the final authority on medical problems in the world for several centuries. His most significant medical works are the Qanun (Canon) and a thesis on cardiac drugs”. The Canon of Medicine (Qanun: Law of Medicine) is one of the most famous books in the history of medicine. This book is a five volume medical encyclopedia that was completed in 1025. The eleventh section of the third book primarily deals with different kinds of heart diseases, their effects, and treatment. It should be remembered that the Canon of Avicenna was written in early 11th century and it should be reviewed in the light of the state of knowledge concerning heart diseases and their treatment attained at that time. Researchers today have the advantage of highly advanced instruments which were not available to Ibn Sina 1000 years ago. That he wrote this section of the Canon in such detail and compiled a separate thesis on heart drugs are enough to prove that he had a clear understanding of the fatal character of heart diseases. He was a really scientific genius and medical practitioner. About 1000 years ago, he created many medical hypotheses and tried to discover unknown things related with humanity. Especially anatolian muslim researchers have to follow this way if they want to be succeeded or add some fantastic discoveries on science.

Keywords: Ibn Sina, Avicenna, The Canon of Medicine.

Introduction

Anatolia has hosted many civilizations. When carefully examined, it is observed that many successful scientists had lived in Anatolia. That means Anatolia has a mysterious sources of inspiration which induce scientific developments. So, one of them is Ibn Sina (980-1037). He was born in the village of Afshana, near Bukhara. Ibn Sina received his early education in his town and by the age of 10 he became a Quran Hafiz. He had exceptional intellectual skills. In some of his teenage years he lived in Anatolia. At the age of sixteen he dedicated all his efforts to learn medicine and when he was eighteen, he gained the status of a reputed physician (1). His synthesis of Islamic medicine, al Qanun reputed physician fi’l tibb (The Canon of Medicine), was the final authority on medical problems in the world for several centuries. His most significant medical works are the Qanun (Canon) and a thesis on cardiac drugs” (2). The Canon of Medicine (Qanun: Law of Medicine) is one of the most famous books in the history of medicine. This book is a five volume medical encyclopedia that was completed in 1025 (3). The eleventh section of the third book primarily deals with different kinds of heart diseases, their effects, and treatment (4).

Physical examination

Ibn Sina was also the pioneer of the modern approach of examining the pulse, using with wrist. It is still practiced in the daily practice (5). He talked about that palpitation is a physiological trouble of the heart caused by injuries to the heart. All kinds of weaknesses of the heart result in palpitation on account of disharmony in its temperament. Avicenna repeats the statement that when palpitation becomes acute it may lead to fainting and when the latter becomes acute and constant it may cause death (6).

Pericardial disease

Ibn Sina states that the heart may be affected by an inflammation of its outer covering or any other organ close to it. Moreover, this inflammation is the cause of palpitation and fainting and may lead to instant death” (7). He clearly described pericardial effusion when he says: “In the case of the accumulation of toxic matter, the matter may be deposited in the space between the cardiac muscle and the membrane that covers it” (8).
Prevention of cardiac diseases

One of the most important factors to achieve this goal is “Exercise”. According to his viewpoint, if exercise is used correctly, intermediately and in an appropriate time, it can prevent physical illnesses as well as diseases (9). He was also particular about the healthy diet of patients with heart disease. He emphasizes that the preservation of our health is by proper diet that is moderate in quantity and quality. Residual amount from every digestion is left over in the body. By repetition of this cycle, there is an accumulation of waste that is harmful to the body from several aspects (10).

The book on drugs for cardiac diseases

“Kitab al Adviyt al Qalbiye” that means “The book on drugs for cardiac diseases”. This book is a separate and independent work which is medicophysiological in character. He described simple and compound drug remedies of heart diseases, but before that, he divided the drugs into several categories. These categories consist of stimulants, diuretics, and cooling agents. In this book, drugs are discussed explaining how they act on the heart. Furthermore, he described the dosage and strength of each drug and application techniques (11). One of the drugs mentioned in this book is zarab. He wrote that zarab (Taxus baccata L.) sets the heart at ease. It is recently demonstrated that this drug possessed calcium channel blocking activity (12). However, it is difficult to find out in which cardiac disturbance related with using this plant.

Conclusion

It is correct that Ibn Sina hasn’t known about heart surgery and percutan coronary intervention. But, it should be remembered that the Canon of Avicenna was written in early 11th century and it should be reviewed in the light of the state of knowledge concerning heart diseases and their treatment attained at that time. Researchers today have the advantage of highly advanced instruments which were not available to Ibn Sina 1000 years ago. That he wrote this section of the Canon in such detail and compiled a separate thesis on heart drugs are enough to prove that he had a clear understanding of the fatal character of heart diseases. He was a really scientific genius and medical practitioner. About 1000 years ago, he created many medical hypotheses and tried to discover unknown things related with humanity. Especially Anatolian Muslim researchers have to follow this way if they want to be succeed or add some fantastic discoveries on science.

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